## **ABSTRACT**

## 1 X N OR N X 1 OPTICAL SWITCH HAVING A PLURALITY OF MOVABLE LIGHT GUIDING MICROSTRUCTURES

A 1 x N or N x 1 optical switch based on a plurality of movable MEMS-created platforms, each carrying a light guiding structure such as a waveguide, where the position of the platforms determines which optical path is connected through the optical switch. The MEMS-created platforms are formed integral with the substrate of the optical switch. The waveguides residing on the movable platforms gradually change the direction of the optical signal in order to minimize losses. The movable platforms can move linearly or rotationally, for example. Also described is a method for fabricating such an optical switch and its components by etching from the bottom of the substrate and through the oxide.

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